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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/641,302

08/15/2003

In Tae Hwang

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3551

35884

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07/24/2008

LEE, HONG, DEGERMAN, KANG & SCHMADEKA

660 S. FIGUEROA STREET

Suite 2300

LOS ANGELES, CA 90017

EXAMINER

DUONG, CHRISTINE T

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/641,302	<b>Applicant(s)</b> HWANG, IN TAE	
	<b>Examiner</b> CHRISTINE DUONG	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-29 and 40-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-29 and 40-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 May 2008 has been entered.

### ***Response to Amendment***

This is in response to the Applicant's arguments and amendments filed on 03 April 2008 in which claims 23-29, 40-45 are currently pending.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 23-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 23-26 are directed to forming a data structure without a utility.

### ***Claim Objections***

4. Claim 43 is objected to because of the following informalities: it is suggested to replace "the time resource request" in line 5 with --a time resource request--.

Appropriate correction is required.

5.

**6. Claim Rejections - 35 USC § 103**

7. Claims 23, 27, 40, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran et al. (US Patent No. 5,541,924) in view of Jamal (US Patent No. 5,754,537).

Regarding claims **23, 27, 40, 43**, Tran et al. discloses a method of transmitting data in a wireless communication system:

forming a data frame in a mobile station having a header portion and a data portion ("header segment, typically consists of routing and identification information, and also include all or the first portion of the packet the subscriber unit is transmitting" column 3 lines 59-62), wherein the header portion has at least a first field to indicated to the network that the data frame has a time resource request ("the access request, referred to as the header segment" column 3 lines 58-59), and a third field to contain control information necessary to process the data portion ("the remainder of the uplink time slot may include error detection bits that are the result of a Cyclic Redundancy Check (CRC) 218 computation" column 3 lines 64-67);

transmitting the data frame to the network ("sending a header segment in the selected uplink time slot" column 4 lines 52-54);

allocating the time resource responsive to the time resource request by the network ("determining, on the same numbered downlink time slot of the next TDMA frame, whether the subscriber unit has gained access to the uplink channel" column 4 lines 60-63);

receiving an indication at the mobile station of the allocated time resource (“where the subscriber unit has gained access to the uplink channel” column 4 lines 63-64);

transmitting the data frame from the mobile station to the network (“transmitting the packet on the selected uplink time slot” column 4 lines 64-65).

However, Tran fails to specifically disclose a second field to contain an amount of time resource required.

Nevertheless, Jamal discloses “a logical channel field Cf1 identifying the type of logical channel (e.g. speech data or background noise data) for which a mobile station is requesting access, a field Cf2 identifying the transmitting mobile station and a field Cf3 identifying the number of TDMA time slots per frame required for the TDMA channel being requested” (column 6 lines 45-51).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a second field contain an amount of time resource required because “the system can determine if the required number of time slots are available for each access request in the queue” (column 6 lines 55-57).

Regarding claim **26**, Tran and Jamal discloses everything claimed as applied above (see claim 23). In addition, Tran discloses transmitting the data frame to a base station (“sending a header segment in the selected uplink time slot” column 4 lines 52-54).

8. Claims 24, 28, 41, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran et al. and Jamal further in view of Buchholz et al. (US Patent No. 5,440,545).

Regarding claims **24, 28, 41, 44**, Tran and Jamal discloses everything claimed as applied above (see claims 23, 27, 40, 43 respectively).

However, Tran and Jamal fails to specifically disclose the control information indicates the data frame is one of a plurality of fragmented data frames.

Nevertheless, Buchholz discloses in fig. 6 total fragment field 640 and fragment number field 650.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the control information indicate the data frame is one of a plurality of fragmented data frames because “the information (message data) portion of a data packet originated by an originating device is too large to fit into the message data portion of packets utilized by intermediate relay stations” (column 1 lines 37-40).

9. Claims 25, 29, 42, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran and Jamal further in view of Diachina (US Patent No. 5,610,917).

Regarding claims **25, 29, 42, 45**, Tran and Jamal discloses everything claimed as applied above (see claims 23, 27, 40, 43 respectively).

However, Tran and Jamal fails to specifically disclose the control information indicates that the data frame is a retransmission of an earlier frame.

Nevertheless, Diachina discloses “a 0 in the initial/repeat field 14 indicates that the channel burst is being transmitted for the first time, while a 1 in the initial/repeat field 14 indicates that the channel burst is being retransmitted” (column 4 lines 64-67).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the control information indicate that the data frame is a retransmission of an earlier frame because it will "recognize whether the received burst is an initial transmission burst or a repeat transmission burst" (column 4 lines 60-62).

### ***Response to Arguments***

10. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE DUONG whose telephone number is (571)270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/  
Supervisory Patent Examiner, Art  
Unit 2616

/Christine Duong/  
Examiner, Art Unit 2616  
07/17/2008